

### REMARKS

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the following remarks.

Claims 157-173 were pending in this application. In this Amendment, Applicant has cancelled without prejudice claims 161, 166, and 169-171, has amended claims 157-160, 162, 165, 167, 168, and 173, and has added new claims 174-192. Accordingly, claims 157-160, 162-165, 167, 168, and 172-192 will be pending herein upon entry of this Amendment.

In the Office Action mailed March 23, 2003, the Examiner rejected claims 157-173 under 35 U.S.C. § 112, first and second paragraphs, as failing to comply with the written description requirement and as being indefinite. The Examiner rejected claims 157-158, 160, 163-166, 168, and 171-173 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,332,214 to Tucker, Sr. ("Tucker") in view of U.S. Patent No. 5,620,381 to Spalding ("Spalding"). The Examiner also rejected claims 159, 161-162, 167, and 169-170 under 35 U.S.C. § 103(a) as being unpatentable over Tucker in view of Spalding and U.S. Patent No. 3,310,309 to Moss ("Moss"). To the extent these rejections might still be applied to the claims presently pending, Applicant respectfully traverses the rejections as described below.

Amended independent claims 157 and 165 and new independent claim 185 recite a putter having a flexible striking surface attachment made of an elastomer and a flexible magnetic sheet attached to the flexible striking surface attachment. While the applied references may teach the use of simple magnetic connections, none teaches or suggests the use of a flexible magnetic sheet in conjunction with a flexible striking surface attachment, which together compensate for

irregularities in the surface contact between the striking surface attachment and the putter head face, resulting in a strong bond that is free from looseness and vibration. Support for the amended claims 157 and 165 and the new claim 185 can be found in the specification as described below.

According to the specification, the striking surface attachment can be a single component as shown in Figure 1. (*See, e.g.*, page 18, lines 10-13 and page 41, lines 11-14.) In one embodiment, the striking surface attachment is made of an elastomer. (*See, e.g.*, page 18, lines 8-10 and page 43, lines 16-18). Thus, if the striking surface is a single component and is made of an elastomer, then the entire striking surface attachment is an elastomer. As one of ordinary skill in the art would appreciate from this disclosure, a striking surface attachment made entirely of an elastomer would, by definition, be flexible.

The specification also describes the use of a magnetic sheet to attach the striking surface attachment to the putter head. (*See, e.g.*, page 20, lines 1-17.) The term "magnetic sheet" or "sheet magnet" is generally understood in the art as referring to a flexible magnet, as evidenced by the archived Magnet Sales & Manufacturing web pages ([www.magnetsales.com](http://www.magnetsales.com)) attached as Exhibit 1 to this Amendment. These archived Magnet Sales & Manufacturing web pages were published contemporaneous with the filing date of the present application (see included search results from WayBackMachine Internet Archive). In addition, the specification cites a Plastalloy 6™ magnet produced by Electrodyne of Batavia, Ohio as an example of a suitable magnet for magnetic sheet 40 on the striking surface attachment 2 in Figure 1C. (*See, e.g.*, page 20, lines 3-5.) As described in the archived Electrodyne web site pages ([www.edyne.com](http://www.edyne.com)) attached as

Exhibit 2 to this Amendment, Plastalloy™ is a flexible magnet product. These archived Electrodyne web pages were also published contemporaneous with the filing date of the present application (see included search results from WayBackMachine Internet Archive). The specification therefore supports the recitation of a flexible magnetic sheet.

As one of ordinary skill in the art would appreciate from the disclosure of the present application, a striking surface attachment made of an elastomer with a flexible magnetic sheet attached provides an overall flexible structure. This flexibility is helpful in providing a positive lock, free from looseness and vibration, between the striking surface attachment and the putter head, as described by an object of the present invention. (*See, e.g.*, page 12, lines 1-4.) In particular, the flexibility enables the magnetic sheet and striking surface attachment to compensate for irregularities between the plane of the putter head and the plane of the flexible magnetic sheet, and provide the strong positive lock. Adding a second flexible magnetic sheet to the putter head face (as recited in claims 158, 175, and 186 and described at, for example, page 20, lines 8-17) can further compensate for these planar irregularities.

Accordingly, because none of the applied references teaches the use of a flexible magnetic sheet in conjunction with a flexible striking surface attachment, Applicant respectfully submits that claims 157, 165, and 185 are patentable over the applied references. Furthermore, Applicant respectfully submits that claims 158-160, 162-164, 167, 168, 172-184 and 186-191 are patentable due at least to their dependencies on amended claims 157, 165, and 185.

Applicant has also added new dependent claims 177-184 and 187-190, which are directed to further features for securing the striking surface attachment to the putter head. New claims

180, 181, 187, and 188 recite a flexible rib on the striking surface attachment that is disposed within a groove in the cavity of the putter head. Support for new claims 180, 181, 187, and 188 can be found in the specification at, for example, page 24, line 17 to page 26, line 21, with reference to Figures 3A-3D. New claims 177-179, 182-184, 189, and 190 recite a flexible strap on the striking surface attachment that is retained by a post on the putter head. Support for new claims 177-179, 182-184, 189, and 190 can be found in the specification at, for example, page 36, lines 1-18, with reference to Figure 13. Applicant respectfully submits that the applied references fail to teach or suggest the flexible rib and flexible strap features, and accordingly, that new claims 177-184 and 187-190 are patentably distinguishable.

Applicant has also added new dependent claims 174, 176, 191, and 192. New claim 174 recites that the flexible magnetic sheet is a multiple pole magnet, which is described in the specification at, for example, page 20, lines 3-5. New claims 176 and 191 recite that the elastomer is a thermoplastic polyester elastomer, which is described in the specification at, for example, page 42, lines 17-23. New claim 192 recites that the magnetic sheet covers substantially the entire face of the striking surface attachment, which is disclosed by, for example, Figures 1B and 1C.

Serial No.: 09/758,152  
Art Unit: 3711

Attorney's Docket No.: STX-001  
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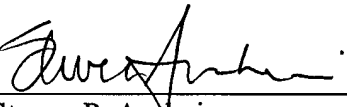
In view of the foregoing, Applicant respectfully submits that all of the pending claims in this case are in condition for allowance. Should the Examiner have any questions or determine that any further action is desirable to place this application in even better condition for issue, the Examiner is encouraged to telephone applicant's undersigned representative at the number listed below.

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1650 Tysons Boulevard  
McLean, VA 22102  
Tel: 703/770-7687

Date: June 22, 2004

Respectfully submitted,

RICHARD B.C. TUCKER, SR.

By:   
Steven P. Arnheim  
Registration No. 43,475

AB/SPA/kmh

Customer No. 28970

Document #: 1288027 v.1



flexible

Exhibit 1  
(6 pages)

Menu

Company Profile

Magnet Design Guide

Materials Guide

Engineering

Production

Quality Systems

# Flexible Magnets



Information

Information Request


Catalog Request

Misc.

Contacts

Glossary of Terms



	Flexible	Grades
		Stock Sizes, Shapes

## General Information

Flexible materials offer the product designer a uniquely desirable combination of properties at lower cost than other magnet materials. The flexibility and machinability of these materials permit design innovations and automated manufacturing techniques not possible with rigid or brittle materials.

Flexible materials can be bent, twisted, coiled, punched, and otherwise machined into almost any shape without loss of magnetic energy.

Higher energy flexible materials may sometimes replace Ceramic 1 materials, if close tolerances are not required, and if operating temperatures are below about 250 F. Standard grades of flexible materials have energy products from 0.6 MGOe to 1.6

## Surface Treatments

No surface treatments are required to protect against corrosion. We are able to laminate a variety of decorative facings to magnetic strip.

## Machining

Flexible materials are relatively easy to fabricate: they may be cut, scored, punched, slit, or die cut to shape. We are equipped to fabricate these materials to specification.

## Magnetizing and Handling

Low energy flexible magnets are magnetized with multiple poles on one surface to give greater holding force. Higher energy flexible magnets are magnetized either multiple pole, or single pole on one surface, as indicated in the catalog. No special handling precautions have to be taken

MGOe.

### Shapes, Sizes, and Grades Available

Standard stocked shapes include strip and sheet in the lower energy grades, strip and a variety of punched parts in ring, disc, and bar shapes in the higher energy grades. Non standard shapes and sizes can be fabricated to blueprint specifications from raw stock. Non standard profiles of the 0.6 MGOe material can be extruded by fabricating special dies.

### Assemblies

Assemblies using metal or other components and magnets can be fabricated by adhering magnets with adhesives to suit a range of environments, by mechanically fastening magnets, or by a combination of these methods. We are able to laminate a variety of standard pressure sensitive adhesives to magnetic strip. Standard adhesives are type "A", for general purpose indoor use, and type "T", for general purpose outdoor use. Type "T" adhesives are formulated for greater resistance to UV effects.

with flexible magnets since they are relatively weak magnetically, and are not brittle.

### Temperature Effects

Magnetic properties of flexible magnets degrade linearly with temperature in the same way as Ceramic magnets. However, the limiting factor for flexible magnets are the binder materials used to render them flexible: these begin to flow at temperatures of about 250 F.

**TOP**

Flexible Grade	Br Gauss	Hc Oersteds	Hci Oersteds	BHmax MGOe	Max.Op. Temp.(° C)	Rel. Cost by Weight
Standard	1,725	1,325	1,340	0.6	100	1
HF1	2,200	2,000	2,400	1.1	100	2
HF2	2,450	2,200	2,400	1.4	100	2.5
HF3	2,650	2,200	2,400	1.6	100	3

*Note:*

*Maximum Operating Temperature is greatly dependent on the operating point of the magnet. If the magnet is expected to encounter the temperatures indicated, please consult our Engineering Department.*



### **Magnet Sales & Manufacturing**

11248 Playa Court  
Culver City, CA 90230  
Toll free: 800-421-6692  
Tel: 310-391-7213  
Fax: 310-390-4357  
E-mail: [info@magnetsales.com](mailto:info@magnetsales.com)  
Web: <http://www.magnetsales.com>

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# Partial Inventory of Flexible Magnets Stock Sizes & Shapes



Flexible Strip

Part No.	Thk	Width
0643	0.030	2.000
10003	0.045	1.000
01604	0.060	0.250
02404	0.060	0.375
0632	0.060	0.500
0630	0.060	0.750
0639	0.060	1.000
09604	0.060	1.500
0642	0.060	2.000
0648	0.060	3.000
0633	0.093	0.250
03206	0.093	0.500
0640	0.093	1.000
0644	0.093	2.000
0635	0.125	0.375
03208	0.125	0.500
04808	0.125	0.750
0645	0.125	1.000
20008	0.125	2.000
0634	0.171	0.312
0637	0.180	0.438
10012	0.187	1.000
0638	0.250	0.594

Flexible Sheet

Part No.	Thk	Finish
8100	0.010	Plain
8103	0.010	Matte white
8120	0.015	Plain
8121-I	0.015	Indoor adhesive
8123	0.015	Matte white
8220	0.020	Plain
8221	0.020	Outdoor adhesive
8221-I	0.020	Indoor adhesive
8222	0.020	Gloss white
8223	0.020	Matte white
8223-C	0.020	Colored
8320	0.030	Plain
8321	0.030	Outdoor adhesive
8321-I	0.030	Indoor adhesive
8322	0.030	Gloss white
8322-SM	0.030	Gloss white, Safemag
8323	0.030	Matte white
8323-SM	0.030	Matte white, Safemag
8323-C	0.030	Colored
8420	0.045	Plain

8423	0.045	Matte white
8620	0.060	Plain
8621	0.060	Outdoor adhesive
8623	0.060	Matte white

Available in 11 colors: Red, yellow, orange, blue, green, brown, black, silver, gold, and white vinyl laminates, and chrome mylar laminates are standard. Non standard colors available on request.



### **Magnet Sales & Manufacturing**

11248 Playa Court  
Culver City, CA 90230  
Toll free: 800-421-6692  
Tel: 310-391-7213  
Fax: 310-390-4357  
E-mail: [info@magnetsales.com](mailto:info@magnetsales.com)  
Web: <http://www.magnetsales.com>

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Enter Web Address:

Adv. Search Compare Archive Pages

49 Results

Searched for <http://www.magnetsales.com>

Note some duplicates are not shown. See [all](#).  
\* denotes when site was updated.

## Search Results for Jan 01, 1996 - Jun 10, 2004

1996	1997	1998	1999	2000	2001	2002	2003	2004
1 pages	10 pages	2 pages	7 pages	9 pages	7 pages	5 pages	3 pages	0 pages
<a href="#">Dec 21, 1996</a> *	<a href="#">Jan 12, 1997</a> *	<a href="#">Feb 15, 1998</a>	<a href="#">Feb 08, 1999</a>	<a href="#">Jan 23, 2000</a>	<a href="#">Feb 02, 2001</a> *	<a href="#">May 26, 2002</a>	<a href="#">Jan 27, 2003</a>	
	<a href="#">Jan 12, 1997</a> *	<a href="#">Dec 05, 1998</a> *	<a href="#">Mar 02, 1999</a>	<a href="#">Apr 07, 2000</a>	<a href="#">Mar 01, 2001</a>	<a href="#">Aug 02, 2002</a>	<a href="#">Apr 10, 2003</a>	
	<a href="#">Jan 12, 1997</a> *		<a href="#">Apr 22, 1999</a>	<a href="#">May 11, 2000</a>	<a href="#">Mar 02, 2001</a>	<a href="#">Aug 14, 2002</a>	<a href="#">Jun 21, 2003</a>	
	<a href="#">Jan 12, 1997</a> *		<a href="#">Apr 23, 1999</a>	<a href="#">May 16, 2000</a>	<a href="#">Mar 30, 2001</a>	<a href="#">Nov 21, 2002</a>		
	<a href="#">Jan 12, 1997</a> *		<a href="#">Apr 27, 1999</a>	<a href="#">Jun 21, 2000</a>	<a href="#">May 16, 2001</a>	<a href="#">Nov 27, 2002</a>		
	<a href="#">Jan 12, 1997</a> *		<a href="#">May 04, 1999</a>	<a href="#">Jul 06, 2000</a>	<a href="#">May 31, 2001</a>			
	<a href="#">Jan 12, 1997</a> *		<a href="#">Nov 03, 1999</a>	<a href="#">Aug 16, 2000</a> *	<a href="#">Jul 21, 2001</a> *			
	<a href="#">Apr 12, 1997</a> *			<a href="#">Oct 19, 2000</a>				
	<a href="#">May 13, 1997</a> *			<a href="#">Dec 06, 2000</a>				
	<a href="#">May 13, 1997</a> *							
	<a href="#">Jul 07, 1997</a> *							

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Exhibit 2  
(4 pages)

4188 Taylor Road  
Batavia, Ohio 45103  
513.732.2822  
[info@edyne.com](mailto:info@edyne.com)  
Fax: 513.732.6953

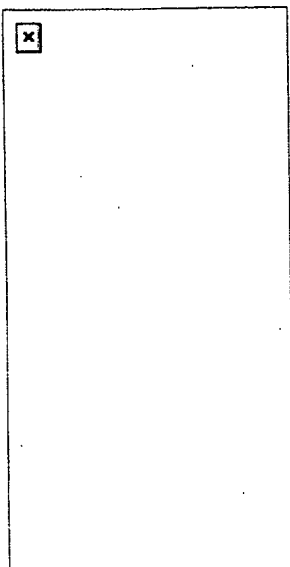
Versatile,  
high quality  
and  
economical  
all describe  
our  
**Plastalloy™**  
products.  
Plastalloy  
rubber  
bonded  
strontium  
ferrite  
permanent  
magnet strip and sheet can be bent,  
twisted and flexed without loss of  
their high magnetic energy. Also, all  
Plastalloy products are lead-free,  
making them the environmentally  
conscious choice for magnet  
applications.

Plastalloy's unique combination of  
physical and magnetic properties  
opens new opportunities for design  
innovation not possible with rigid or  
brittle magnet materials.

Plastalloy products are produced to  
customer specifications in the form of  
sheet, strip and die cut shapes. The  
following value added options are also  
available:

- Pressure Sensitive Adhesive
- Polarity Identification
- Customized Formulations
- Special Cutting Techniques

Plastalloy has the versatility of  
accepting several **methods of  
magnetization**. The standard  
methods, illustrated to the left, are  
conventional, two poles each side,  
and multiple pole. Electrodyne's  
technical staff is available to produce  
specialized magnetizing fixtures to  
meet the customers specific needs.

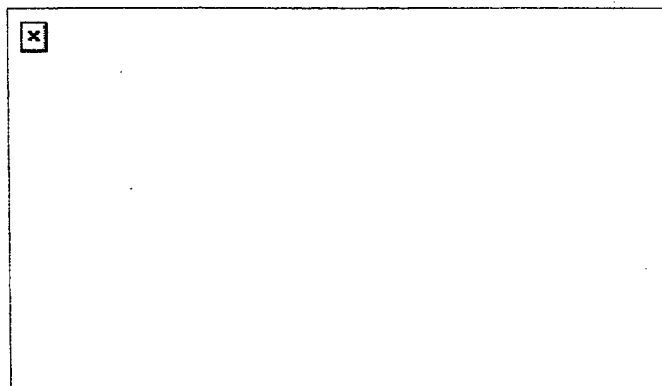
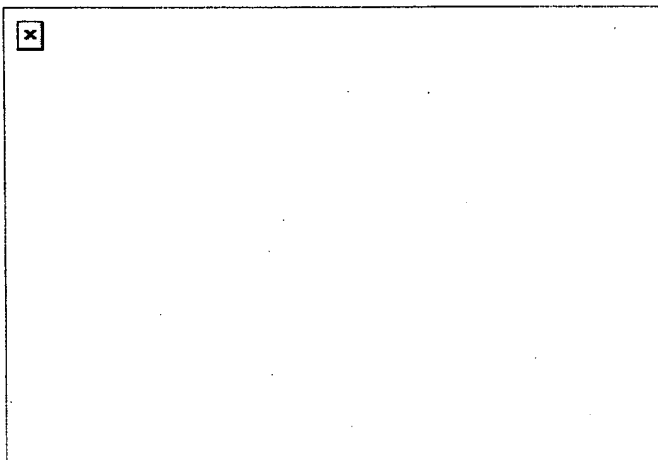


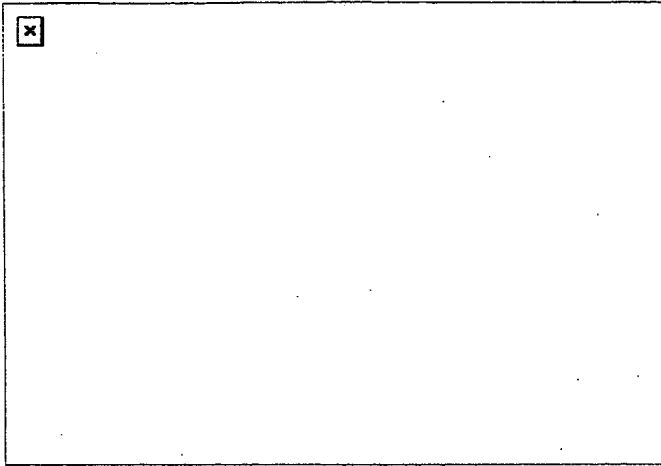
**Reance™** is Electrodyne's trade name for its line of bonded neodymium iron boron permanent magnet products.

Revolutionary Reance opens new possibilities for the design and engineering of new and existing products.

**ReanceC** refers to Electrodyne's compression molded NdFeB products. This process allows Electrodyne to produce parts with a high energy product to customer specifications, while holding tighter dimensional tolerances without the need of expensive secondary grinding and cutting processes. This material is ideal for a number of applications including motors and sensors.

**ReanceF** refers to Electrodyne's flexible NdFeB products. This process enables Electrodyne to produce a product offering magnetic force many times stronger than conventional flexible magnetic materials. ReanceF allows the design engineer to utilize flexible magnetic material in applications generally reserved for rigid magnets.





## 20 Results

## Search Results for Jan 01, 1996 - Jun 10, 2004

1996	1997	1998	1999	2000	2001	2002	2003	2004
0 pages	0 pages	0 pages	2 pages	1 pages	4 pages	6 pages	7 pages	0 pages
			<u>Jan 25, 1999 *</u>	<u>Aug 23, 2000 *</u>	<u>Mar 31, 2001 *</u>	<u>May 30, 2002 *</u>	<u>Feb 09, 2003</u>	
			<u>Oct 10, 1999 *</u>		<u>Apr 05, 2001</u>	<u>Jun 03, 2002</u>	<u>Feb 20, 2003</u>	
					<u>Jul 22, 2001</u>	<u>Jun 04, 2002</u>	<u>Mar 20, 2003</u>	
					<u>Sep 26, 2001</u>	<u>Aug 02, 2002</u>	<u>May 29, 2003</u>	
						<u>Sep 26, 2002</u>	<u>Jun 06, 2003</u>	
						<u>Sep 27, 2002</u>	<u>Jun 20, 2003</u>	
							<u>Jun 23, 2003</u>	

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